

**A SECOND NEW POTAMOBATES FROM PERU, S. A.,
WITH NOTES ON OTHER SPECIES (HEMIP-
TERA—GERRIDAE).***

BY H. B. HUNGERFORD, Lawrence Kansas

I described recently *Potamobates peruvianus*, the first species recorded for Peru. This was collected by F. Woytkowski in the vicinities of Sani Beni and San Pedro. The same energetic collector has now sent me a second species new to science, which I name in his honor.

***Potamobates woytkowskii* n. sp.**

(See Plate II)

Size: Length of wingless male 12.8 mm.; of wingless female 12 mm.

Color: Wingless forms only known. Black with light brown markings above; venter pale. Head light brown above with a diamond shaped black spot. Antennae dark brown to black, beak black tipped. Anterior lobe of the pronotum has a pale brown triangular spot on dorsum and a silvery patch on the side behind each eye; the mesonotum with three longitudinal light brown figures—the lateral ones roughly triangular and the median stripe constricted behind its middle, the caudal end broadest; lateral margins with longitudinal silvery stripe and silvery patches on meso- and meta-acetabula; abdominal dorsum black except for some silvery pubescence laterally; all coxae, and dorsal side of front trochanters and femora pale like the venter; front legs otherwise black, middle and hind legs brown, the femora longitudinally striped, above and below with black lines; connexivum black beneath except for a brown spot sometimes present on the fifth segment and the distal half of the sixth may be brown.

Structural Characteristics: Antennal formula of male holotype: 1st: 2nd: 3rd: 4th:: 10.5: 3.5: 3.6: 4.8. First antennal segment distinctly longer than the width of the head through the eyes, tip of beak barely attaining anterior margin of front coxae. Pronotum a little shorter than the length of the head. Mesonotum of the wingless male about 2.8 times as long as pronotum measured on median dorsal line; a median depressed line on caudal third of mesonotum. Front femora moderately incrassate, with small peglike projection on the underside near distal end. Front tarsus of male one-fourth length of the tibia; the first tarsal segment a little less than one-third as

long as the second. Formula for intermediate leg of male:—femur:tibia:tarsus::18.5:12.3:7. The first tarsal segment more than three times as long as the second. Formula for the posterior leg:—femur:tibia:tarsus::18.6:10:1.3. Posterior tarsus small, first segment longer than the second. The last abdominal tergite of the male slightly longer than the two preceding. In the male the connexivum is triangularly produced behind. In the female the connexivum is produced into a long, finger-like process, thicker in its distal half, somewhat incurved, and nearly as long as the last five abdominal tergites. The first genital segment of the male measured on the median dorsal line nearly as long as five preceding abdominal tergites. The general shape of this segment like that of *P. peruvianus* Hungerford, but having the caudo-lateral angle produced into a broad, usually notched curved expansion, much larger than the toothlike projection above it, thus giving two broad triangular projections as viewed from the right side. The hook-like projection of the second genital shaped much like that of *P. peruvianus* Hungerford but broader with its dorsal margin curled inward. The first dorsal genital of female broadly triangular, bluntly rounded at caudal angle. The last ventral abdominal segment of the female (first genital) large, thickened and left half produced caudally into a broad, flat variable plate as long as basal half. In some specimens the tip of this lobe attains the caudal fifth of the fingerlike projections of the connexiva. (See plate II.)

Location of types: Holotype, allotype and paratypes in the Francis Huntington Snow Entomological Museum, University of Kansas. This species described from eight males and eight females, all wingless, labeled "Peru, S. A., Sept. 9 to Oct. 3, 1936. F. Woytkowski, No. 3682. Vicinity Rioja, Department of San Martin, Jungle 900 meters above sea level."

Comparative notes: While related to the *Potamobates tridentatus* Esaki group, the species is easily recognized by the two broad projections on the right side of the distal margin of the first genital of the male and by the enlarged and extremely asymmetrical last ventral abdominal segment of the female.

Potamobates tridentatus Esaki.

Potamobates tridentata Esaki, Ann. Mus. Nat. Hung., XXIII, p. 251, 1926. We have specimens of this species collected at Ft. Clayton, Canal Zone, by Captain R. F. Edwards. Previously the species has been known only from Costa Rica.

Potamobates horvathi Esaki.

Potamobates horvathi Esaki, Ann. Mus. Nat. Hung. XXIII, p. 254, 1926. This species which has been recorded from Colombia, Honduras, and Guatemala is represented in our collections by long series from Punta Gorda and Río Grande, British Honduras; from Ft. Clayton, Canal Zone, taken by Captain Edwards and from Lan-cetilla, Honduras, taken by John Deal.

Potamobates williamsi Hungerford.

Potamobates williamsi Hungerford, Bull. Brook. Ent. Soc., XXVII, p. 228, 1932. This species was described from Tena and Mera, Ecuador, from specimens taken by Doctor F. X. Williams in 1923. I recently received specimens from the Río Napo watershed taken by Clarke-MacIntyre. The females of this species are readily distinguished from those of *P. tridentatus* Esaki by the first dorsal genital which is triangular in *P. williamsi* Hungerford with caudal end bluntly rounded where as in *P. tridentatus* Esaki the caudal end is a long, twisted finger-like process.

Since I described *P. williamsi*, *P. peruvianus* and *P. thomasi* without drawings, I am adding them on the plate which accom-panies this paper.¹

PLATE II.

A SECOND NEW POTAMOBATES FROM PERU—HUNGERFORD.

1. *Potamobates williamsi* Hungerford—right side of male genital segments.
2. *Potamobates peruvianus* Hungerford—right side of male genital segments.
3. *Potamobates woytkowskii* Hungerford—ventral view of female abdomen.
4. *Potamobates woytkowskii* Hungerford—right side of male genital segments.
5. *Potamobates thomasi* Hungerford—left side of male genital segments.
6. *Potamobates thomasi* Hungerford—ventral view of female abdomen.
7. *Potamobates thomasi* Hungerford—ventral view of male genital segments.
8. *Potamobates thomasi* Hungerford—dorsal view of female abdomen.

¹ *Potamobates peruvianus* Hungerford 1936 Bull. Br. Ent. Soc., XXXI, pp. 178-180.

Potamobates thomasi 1937 Jl. Kans. Ent. Soc., X, pp. 63-65.